

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022042**Date Inspected:** 19-Mar-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zho Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD

DCP:

Segment 12BW

This Quality Assurance (QA) Inspector witnessed final tension verification for T-rib clips at Panel Point (PP) 113 and PP 114.5 for Segment 12AW. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00628 Dated March 19, 2011.

Bolt sizes used were M16 x 45 DHGM160049 and final torque required was 180 N-m.

Bolt sizes used were M16 x 45 DHGM160021 and final torque required was 180 N-m.

Bolt sizes used were M16 x 50 DHGM160003 and final torque required was 200 N-m.

Bolt sizes used were M16 x 50 DHGM160011 and final torque required was 200 N-m.

Bolt sizes used were M16 x 55 DHGM160011 and final torque required was 200 N-m.

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Bolt sizes used were M16 x 65 DHGM160011 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-776.

WELDING:

Segment 12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3002M-090; located On Orthotropic Box Girder (OBG) Bottom Plate to Longitudinal Diaphragm CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding The Welding Repair Report (WRR) was B-WR20464. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-2G (2F) FCM-Repair-1. See attached photo for further details.

Segment 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 041713 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12C-026; located On Orthotropic Box Girder (OBG) Edge Plate to Cantilever Bracket Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng . This QA Inspector observed the base material appears to have been preheated by a torch prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2113-FCM-1. See attached photo for further details.

Segment 12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 044504 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE12C-014; located On Orthotropic Box Girder (OBG) Edge Plate to Cantilever Bracket Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang . This QA Inspector observed the base material appears to have been preheated by a torch prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2113-FCM-1.

Segment 12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 046709 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12C-018; located On Orthotropic Box Girder (OBG) Edge Plate to Cantilever Bracket Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng . This QA Inspector observed the base material appears to have been preheated by a torch prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2113-FCM-1.

Segment 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 041713 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12C-022; located On Orthotropic Box Girder (OBG) Edge Plate to Cantilever Bracket Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng . This QA Inspector observed the base material appears to have been preheated by a torch prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. The welding variables recorded by QC

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appeared to comply with applicable WPS-B-P-2113-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
